

U.S. PATENT & TRADEMARK OFFICE
JUN 24 2004
Under the
Substitution

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

(Use as many sheets as necessary)

Complete if Known

Application Number	09/769,147
Filing Date	1/25/2001
First Named Inventor	Spencer A. Rathus
Art Unit	2876
Examiner Name	Le, Thien Minh
Attorney Docket Number	660-029

Sheet	5	of	5
-------	---	----	---

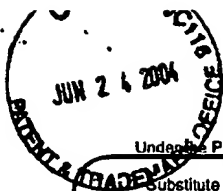
[illegible][illegible]

Date Considered	2/2/198
-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 4

of 5

Complete if Known

Application Number	09/769,147
Filing Date	1/25/2001
First Named Inventor	Spencer A. Rathus
Art Unit	2876
Examiner Name	Le, Thien Minh
Attorney Docket Number	660-079

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
[initials]	75	US- 5,615,123	03-25-1997	Davidson et al.	[initials]
	76	US- 5,644,408	07-01-1997	Li et al.	
	77	US- 5,751,590	05-12-1998	Cannon et al.	
	78	US- 5,801,944	09-01-1998	Kara	
	79	US- 5,870,030	09-11-1998	Deluca et al.	
	80	US- 5,872,589	02-16-1999	Morales	
	81	US- 5,948,040	09-07-1999	DeLorme et al.	
	82	US- 5,978,013	11-02-1999	Jones et al.	
	83	US- 5,978,648	11-02-1999	George et al.	
	84	US- 5,995,105	11-30-1999	Reber et al.	
	85	US- 6,002,491	12-14-1999	Li et al.	
	86	US- 6,064,832	05-16-2000	Sato et al.	
	87	US- 6,072,186	06-06-2000	Yokonuma et al.	
	88	US- 6,085,976	07-11-2000	Sehr	
	89	US- 6,095,418	08-01-2000	Swartz et al.	
	90	US- 6,149,441	11-21-2000	Pellegrino et al.	
	91	US- 6,269,342	07-31-2001	Brick et al.	
	92	US- 6,270,351	08-07-2001	Roper	
	93	US- 6,311,214	10-30-2001	Rhoads	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁴
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)				

Examiner
Signature

THIEN LE

Date

Considered

8/2/06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (08-03)

Approved for use through 07/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	09/769,147
Filing Date	1/25/2001
First Named Inventor	Spencer A. Rathus
Art Unit	2876
Examiner Name	Le, Thien Minh
Attorney Docket Number	660-029

Sheet 3 of 5

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
BTM	51	US- 5,368,129	11-29-1994	Von Kohorn	/
	52	US- 5,369,571	11-29-1994	Metts	
	53	US- 5,385,371	01-31-1995	Izawa	
	54	US- 5,385,475	01-31-1995	Sudman et al.	
	55	US- 5,397,156	03-14-1995	Schach et al.	
	56	US- 5,401,944	03-28-1995	Bravman	
	57	US- 5,410,642	04-25-1995	Hakamatsuka et al.	
	58	US- 5,412,191	05-02-1995	Baitz et al.	
	59	US- 5,451,998	09-19-1995	Hamrick	
	60	US- 5,452,379	09-19-1995	Poor	
	61	US- 5,493,355	02-20-1996	Kazami	
	62	US- 5,500,681	03-19-1996	Jones	
	63	US- 5,505,494	04-09-1996	Belluci et al.	
	64	US- 5,506,697	04-09-1996	Li et al.	
	65	US- 5,551,011	08-27-1996	Danby et al.	
	66	US- 5,555,496	09-10-1996	Tackbary et al.	
	67	US- 5,559,714	09-24-1996	Banks et al.	
	68	US- 5,578,797	11-26-1996	Hewitt et al.	
	69	US- 5,612,868	03-18-1997	Off et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁴
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
BTM	70	JP 07056941 A	03-03-1995	Tanaka et al.	/	
	71	JP 7-64,169	03-10-1995	Masaru, Mase		
	72	JP 11-355,699	06-05-1998	Yukihiro, Sai		
	73	JP 10269326 A	10-09-1998	Nakamura et al		
BTM	74	JP 2001/142971	05-25-2001	Atsushi	/	

Examiner
Signature

THIEN/LE

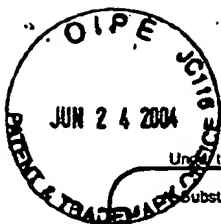
Date
Considered

8/2/02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	09/769,147
Filing Date	1/25/2001
First Named Inventor	Spencer A. Rathus
Art Unit	2876
Examiner Name	Le, Thien Minh
Attorney Docket Number	660-029

Sheet 2 of 5

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
LM	26	US- 5,031,098	07-09-1991	Miller et al.	
	27	US- 5,111,196	05-05-1992	Hunt, Peter F.	
	28	US- 5,119,188	06-02-1992	McCalley et al.	
	29	US- 5,158,310	10-27-1992	Tannehill et al.	
	30	US- 5,168,303	12-01-1992	Ikenoue et al.	
	31	US- 5,173,851	12-22-1992	Off et al.	
	32	US- 5,181,062	01-19-1993	Kazumi, Jiro	
	33	US- 5,204,813	04-20-1993	Samph et al.	
	34	US- 5,222,624	06-29-1993	Burr	
	35	US- 5,235,509	08-10-1993	Mueller et al.	
	36	US- 5,262,860	11-16-1993	Fitzpatrick et al.	
	37	US- 5,287,181	02-15-1994	Holman	
	38	US- 5,287,266	02-15-1994	Malec et al.	
	39	US- 5,288,977	02-22-1994	Amendolia et al.	
	40	US- 5,295,064	03-15-1994	Malec et al.	
	41	US- 5,295,836	03-22-1994	Ryu et al.	
	42	US- 5,302,990	04-12-1994	Satoh et al.	
	43	US- 5,310,349	05-10-1994	Daniels et al.	
	44	US- 5,353,219	10-04-1994	Mueller et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
LM	45	JP 02127792 A	05-16-1990	Oki, Shinji		
	46	JP 03151263 A	06-27-1991	Osawa		
	47	JP 03174693 A	07-29-1991	Ashida et al.		
	48	JP 04-023,183	01-27-1992	Masahide		
	49	JP 06110913 A	04-22-1994	Watanabe		
	50	JP 6-233,159	08-19-1994	Tsutomu		

Examiner
Signature

TAIEN LE

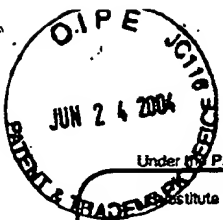
Date
Considered

8/2/02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 5

Complete if Known

Application Number	09/769,147
Filing Date	1/25/2001
First Named Inventor	Spencer A. Rathus
Art Unit	2876
Examiner Name	Le, Thien Minh
Attorney Docket Number	660-029

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
[Signature]	1	US 3,705,384	12-05-1972	Wahlberg	
	2	US 3,735,350	05-22-1973	Lemelson	
	3	US 3,976,995	08-24-1976	Sebestyen	
	4	US 4,117,542	09-26-1978	Klausner et al.	
	5	US 4,283,621	08-11-1981	Pembroke	
	6	US 4,601,573	07-22-1986	Utsugi	
	7	US 4,659,213	04-21-1987	Matsumoto	
	8	US 4,711,994	12-08-1987	Greenberg	
	9	US 4,723,212	02-02-1988	Mindrum et al.	
	10	US 4,793,813	12-27-1998	Bitzer et al.	
	11	US 4,812,879	03-14-1989	Suzuki	
	12	US 4,820,167	04-11-1989	Nobles et al.	
	13	US 4,839,507	06-13-1989	May	
	14	US 4,897,865	01-30-1990	Canuel	
	15	US 4,910,672	03-20-1990	Off et al.	
	16	US 4,984,155	01-08-1991	Geier et al.	
	17	US 5,002,491	03-26-1991	Abrahamson et al.	
	18	US 5,021,984	06-04-1991	Meade et al.	
	19	US 5,027,196	06-25-1991	Ono et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Country Code ⁴ Number ⁵ Kind Code ⁶ (if known)				
[Signature]	20	DE 2452202 A1	11-20-1975	Waterbury		
	21	JP 60-46,684	03-13-1985	Masaaki et al.		
	22	JP 62-98,334	05-07-1987	Yoshitomo, Abe		
	23	EP 357899 A	03-14-1990	Schulz		
	24	GB 2 232 119 A	12-05-1990	Webster et al.		
	25	JP 02103025 A	04-16-1990	Hirata, Hideyuk		

Examiner
Signature

THIEN LE

Date
Considered

8/2/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

36/28/2004 WABRHAM1 00000085 09769147

01 FC:1806

180.00 OP